

Winter Climate Information

For South Central Texas

Winter of 2010/2011 began at 538 PM CST Tuesday, December 21st, 2010 and ends at 621 PM CDT Sunday, March 20, 2011, when the Spring of 2011 officially begins.

Winter over South Central Texas brings dynamic combinations of weather from warm to cold days, and also very wet periods that can bring flooding to extended dry periods.

The table below summarizes 30 year 1971 to 2000 normals, and a few extremes of climate record for Austin, Del Rio, and San Antonio for December to March. For precipitation, the latest 30 year 1971 to 2000 normal is shown under average rainfall, and the all time driest and wettest December, January, February and March of record is listed.

Austin/Mabry

Month	High	Low	All Time High	All Time Low	Average Rainfall	All Time Driest	All Time Wettest
December	62.3	41.9	90	4	2.44	0	16.14
January	60.3	40.0	90	-2	1.89	0	9.21
February	65.1	44.0	99	-1	1.99	0	9.41
March	72.5	50.9	98	18	2.14	0	7.23

Austin/Bergstrom

Month	High	Low	All Time High	All Time Low	Average Rainfall	All Time Driest	All Time Wettest
December	63.2	42.5	91	6	2.53	0.01	12.88
January	61.5	40.6	89	-5	2.21	0.02	10.53
February	66.5	44.4	101	8	2.02	0.02	7.34
March	73.5	51.7	98	19	2.36	0.05	6.52

Del Rio

Month	High	Low	All Time High	All Time Low	Average Rainfall	All Time Driest	All Time Wettest
December	63.5	41.2	90	6	0.75	Trace	3.93
January	62.8	39.7	92	12	0.57	Trace	4.12
February	68.0	44.1	99	11	0.96	0	7.82
March	76.0	51.6	103	19	0.96	Trace	3.93

San Antonio

Month	High	Low	All Time High	All Time Low	Average Rainfall	All Time Driest	All Time Wettest
December	64.0	40.8	90	6	1.96	0	13.96
January	62.1	38.6	89	0	1.66	Trace	8.52
February	67.1	42.4	100	4	1.75	Trace	7.88
March	74.3	49.9	100	19	1.89	Trace	6.12

A summary of some of the notable winter weather events over South Central Texas since the 1880s are listed below.

The winter of 1880/1881 was a cold winter. At Austin, January 1881 was the 3rd coldest January of record at Austin from 1854 to 2009. The winter of 1885/1886 also brought cold conditions. January 1886 was the 7th coldest January at San Antonio and the 9th coldest at Austin. Lows in the January 1886 cold outbreak fell to 6 at San Antonio on January 8, 1886. This is still a record daily low for January 8th through 2010. The winter of 1888/1889 was a wet period, and one that brought the 3rd wettest January at Austin and the 6th wettest January at San Antonio.

In February of 1899 a strong arctic cold front came to Texas, causing record lows for the month of February of -1 at Austin and 4 at San Antonio on February 12, 1899. During this historic cold spell, extremely cold temperatures affected the entire state of Texas. On February 13, 1899 the whole part of Galveston Bay, except the main channel, was covered by thin ice. Lows in other locations around Texas on February 12, 1899 include; Tulia -23; Amarillo -16; Brownsville 16; Dallas-Ft. Worth -8; Waco -5; Laredo 5; Galveston 8; and Corpus Christi 11. In the February of 1899 arctic outbreak, the coldest low in Brownsville was 12 on February 13, 1899, still an all time record low for Brownsville. The low of -23 at Tulia, in the southern part of the Texas panhandle, on February 12, 1899 ties the record low for the state of Texas, with Seminole, where a low of -23 was also observed on February 8, 1933. In the February of 1899 cold outbreak, unofficial reports of -30 came from Wolf Creek and also southwest of Perryton, both in the northern part of the Texas panhandle.

The wettest December at Austin was in December 1913, when a December flood event came. Austin had 16.14 inches of rain in December 1913. From December 1 to 5, 1913, widespread floods came to Central and Southeast Texas, plus parts of South Central Texas. From December 1 to 5, 1913 San Marcos received 15.50 inches of rain, Austin 14.07 inches, New Braunfels 6.44 inches, Blanco 6.71 inches, and San Antonio 3.36 inches of rain. San Marcos had 10 inches of rain in one day on December 4, 1913. Austin received 10.66 inches of rain on the 3rd and 4th of December 1913, while San Marcos received 12.45 inches on the same days.

The coldest New Years Day at Austin and San Antonio came on January 1st, 1928. The high at Austin Mueller Airport January 1, 1928 was 25 and low was 17, and at San Antonio the high was 28 and the low was 19. Del Rio also had one of its coldest New Years Day on January 1, 1928, when the high was 31 and low 20. Another cold New Years Day at Del Rio came 19 years later on January 1st, 1947, when the high was 28 and low was 24.

In January 1930 cold weather came to the area, bringing the coldest January of record at Del Rio and San Antonio and the 2nd coldest January at Austin. The average January temperature at Del Rio was 43.7; at San Antonio 43.3; and at Austin 39.4. The coldest January at Austin was January 1860, when the average temperature was 36.6.

The coldest All-Time daily lows during the winter season at Austin and San Antonio came in late January 1949, when a strong arctic front came to the area, leaving lows of -5 at Austin Bergstrom, -2 at Austin Mueller Airport, 0 at San Antonio, and 17 at Del Rio on January 31, 1949. Snow also came with this arctic blast. Austin received 6.5 inches of snow, San Antonio 4.7 inches of snow and Del Rio had 1.2 inches of snow. The cold lows in this event occurred after skies cleared and snow remained on the ground on January 31st, 1949.

Late January and early February 1951 brought another strong arctic outbreak to the area. During this event San Antonio stayed below freezing for 108 hours and 28 minutes, from January 29th to February 2nd, 1951. This is a record time for below freezing temperatures in San Antonio. Austin was below freezing for 112 hours in the late January and early February of 1951 arctic outbreak. The record for consecutive hours below freezing at Austin was 140 hours from December 21 to 27, 1983. The lows on February 2nd, 1951 were as follows, Austin 7, San Antonio 6, and Del Rio 11. Lows of this magnitude were not seen again until December 1989, when the low was 4 at Austin, 6 at San Antonio, and 10 at Del Rio. The low of 10 at Del Rio December 23, 1989 was an All-Time low of record for Del Rio.

On the other side of extremes with winter weather, in December 1955 the warmest Christmas Day came when the high was 90 at Austin Mueller Airport, 91 at Austin Bergstrom, 90 at San Antonio, and 87 at Del Rio. These are record highs for the month of December at Austin and San Antonio. The record high in December at Del Rio was 90 on December 4, 1977.

In January of 1962 a strong arctic outbreak moved across Texas. This brought lows on January 10th of 13 at Austin and 10 at San Antonio. The coldest low for Del Rio in the January of 1962 Arctic outbreak was 13 on January 12th.

During the winters from 1963 to 1967 snow events were more common than usual. Usually snow falls on average about once every 2 to 3 years in the Austin Area to around 3 to 4 years in the Del Rio and San Antonio Areas. Austin had 1 inch of snow February 11, 1963 followed by additional snows of 0.6 inches January 16, 1964; 4 inches February 21, 1964; 0.5 inches February 24, 1965; 2 inches March 2, 1965; 6 inches February 22 to 23, 1966; and 2 inches on February 6, 1967. San Antonio had 2 inches of snow on February 21, 1964 and 3.5 inches of snow on February 22 to 23, 1966. Snow at Del Rio was 3

inches on March 3, 1965; 2.2 inches February 22, 1966; and 0.6 inches of snow on February 6, 1967.

In January 1968, heavy rains and floods came to South Central Texas. This was the wettest January of record at San Antonio with 8.52 inches of rain. From January 17 to 21, 1968 San Antonio had 7.20 inches of rain, Johnson City 7.27 inches, Austin 6.16 inches, New Braunfels 6.41 inches, Boerne 4.94 inches, and Poteet 6.60 inches of rain. Del Rio was west of the heavy rain and had 0.16 inches of rain, while Brackettville had 2.28 inches and Sabinal 3.97 inches of rain from January 17 to 21, 1968.

The 1970s brought a few cold winters. The 1970s began with a cold January in 1970. A year later this changed when mild conditions prevailed in January 1971, especially at the end of the month, during the drought of 1970 /1971. A record high for January of 90 was observed at Austin and 89 at San Antonio on January 30, 1971. January 1972 brought more cooler days, followed by a cold January in 1973. January 8 to 12, 1973 was a cold period. Austin had 116 hours of below freezing temperatures from January 8 to 12, 1973. San Antonio picked up 0.8 inches of snow January 11th. A 2nd snow event for the winter season of 1972/1973 came on February 7 and 8, 1973, when Austin, Del Rio and San Antonio had snow. In the late winter to spring and early summer of 1973, a stormy period brought numerous severe weather and flood events. Severe weather in March 1973 left a tornado at Burnet, on March 10th, 1973, when 40 businesses and 161 homes were damaged or destroyed. The mid to late part of the 1970s had some cold winters, during the winters of 1976/1977, 1977/1978 and 1978/1979. In this time period, the weather patterns brought mostly cloudy conditions in the winter. January 1977, 1978 and 1979 were among some of the colder Januarys at Austin, Del Rio, and San Antonio.

A milder winter came from December 1979 to February of 1980, although this was briefly interrupted by a strong cold arctic outbreak in early March 1980. After a warm day on February 29, 1980, much colder conditions came March 1st. Lows on March 2, 1980 fell to 19 at Austin and San Antonio, and 21 at Del Rio. A quick warming trend followed. The 1980s brought several additional strong arctic weather events in December 1983, January to early February 1985, and again in December 1989. The coldest December lows of record came with these arctic weather events in 1983 and again in 1989. Another arctic weather event of shorter duration came in December of 1990, when very warm conditions on December 21, 1990 were replaced by much colder weather December 22 to 26, 1990. December 1983 was the coldest month of record at San Antonio, with the average December temperature of 43.0 degrees. In the cold of December 1989, the coldest all time low of record for Del Rio came December 23, with a low of 10. December record lows of 4 at Austin Mueller Airport, 6 at Austin Bergstrom, and 6 at San Antonio were observed December 23, 1989.

During the 1982/1983 El Nino several severe weather events and some flooding came to South Central Texas from late November and December of 1982 to March, 1983. A few windy days came in the winter of 1982/1983. The windiest day of 1983 came just after winter on Friday April 1, 1983. A year later in February 1984, a powerful low, with a cold front, moved north of South Central Texas, bringing very windy conditions on February 26 and 27, 1984.

From January 11 to 13, 1985 a heavy snow event came to South Central Texas, where San Antonio picked up 13.5 inches of snow, Del Rio 8.6 inches and Austin 3.9 inches of snow. A snow event returned to the Del Rio area in early January 1986, when from January 7 to 8, 1986 Del Rio picked up 8.2 inches of snow. At the end of January 1985 another strong arctic outbreak came to the area on the 31st. This left very cold temperatures across the area on February 1st, 1985 with the highs of only 23 at Austin Mueller Airport, 25 at Austin Bergstrom, 24 at San Antonio, and 26 at Del Rio. The highs of 24 at San Antonio, 25 at Austin Bergstrom and 26 at Del Rio on February 1st, 1985 are record low daily highs for the month of February. The record coldest daytime high at the Austin City Climate location was 22 on February 4, 1923.

After dry winters in 1987/1988 and 1988/1989, floods returned in January 1991 to South Central Texas. Austin had its wettest January of record in January 1991, with 10.53 inches of rain at Austin Bergstrom and 9.21 inches at Austin Mueller Airport. A flood returned in late December 1991 just before Christmas. Heavy rains started the night of December 18th to the day of December 19th, 1991. The heavy rains continued on Friday, December 20th and Saturday, December 21st, 1991. The rainy pattern continued from January to June of 1992. December 1991 was the wettest December for San Antonio with 13.96 inches of rain, and the wettest December at Austin Bergstrom with 12.88 inches of rain. At Austin Mabry December 1991 was the 2nd wettest December with 14.16 inches of rain, after December of 1913, when 16.14 inches of rain fell in Austin.

February is a month that has brought the most extremes in temperature, as the area begins to warm up, followed by periods of very cold weather in wake of arctic cold fronts. This was especially true in 1996. February 1996 was an extreme month from a hard freeze in the early part of the month to summer like warmth in mid to late February, and then back to very cold conditions on February 29th, 1996. A brief winter precipitation event came in early February 1996, where Austin received snow on Saturday, February 3, 1996. Conditions warmed up considerably by the mid to late part of the month, with highs reaching 100 February 21 at San Antonio, 101 at Austin Bergstrom, 99 at Austin Mueller Airport and 99 at Del Rio. February 1996 closed out the month on the 29th with much colder conditions and a mix of winter like precipitation over the Hill Country. Welcome rains came to the rest of the area on February 29, 1996, in what was a dry year in 1996.

Heavy rains and severe weather affected the area from late December 1997 through February and March of 1998. This was a strong El Nino year like 1982/1983. The opposite came a year later from December 1998 through March of 1999, when very dry conditions came to the area, after the floods of October 1998.

As the 21st century began, cold conditions came in December of 2000 and January 2001. An ice storm came on December 12 and 13, 2000. This was followed by additional winter precipitation events the evening of November 28th to early morning of November 29th, 2001, and from February 22 to 24, 2003. Another winter precipitation event came the night of February 13th and early morning of February 14, 2004, bringing snow and sleet. In 2005 a winter precipitation event, with freezing rain, came in the late afternoon and evening of December 7th to the early morning hours of December 8th, 2005.

An ice storm came to Central and South Central Texas in January of 2007. Precipitation was beginning to pick up in the fall of 2006, and increased in the winter and spring of 2007. January 2007 precipitation was one of the wetter Januaries of record. A widespread winter precipitation event came January 15th to 17th, 2007. Severe weather and flash flooding came in the morning hours of Saturday, January 13, 2007, as conditions transformed from mild to colder during the day. Another wave of cold air came on Sunday evening, January 14, 2007. Lows fell to near and below freezing the night of the 14th to the early morning of Monday January 15th. A winter precipitation making weather system to the west caused several days of winter precipitation from Monday the 15th to Wednesday the 17th. The January 2007 winter precipitation event brought freezing rain and sleet. There was some 1 to 2 inch snow falls across the Hill Country and some snow was observed in the Austin Area. January 2007 was the coldest month at Austin and San Antonio since December 2000, and at Del Rio since December 1989. For January, January 2007 was the coldest January at Austin Mabry since 1991; the coldest at Austin Bergstrom and Del Rio since 1985; and the coldest January at San Antonio since 1988.

The Fall of 2007 through the Winter of 2008 was the beginning of another dry period. This brought dry fall to winter periods that continued the following year in the Fall of 2008 through the Winter of 2009. These dry winter seasons had extremes in temperature from warm days to much cooler days followed by rapid warming trends. On December 9th, 2008 afternoon highs warmed to the 80s, and then fell to the 30s during the evening in wake of the cold front. A brief winter precipitation event came the night of December 9th to the early morning of December 10th, 2008. This was followed by another winter precipitation event in late January of 2009. After turning very cold on January 27th, 2009, a low pressure system aloft moved near South Central Texas late in the day and overnight hours of January 27-28, 2009. A freezing rain event came from just before sunset on Tuesday, January 27th, to the predawn hours of the 28th, from parts of the Hill Country to parts of Central Texas. It dried out rapidly just before and after sunrise on January 28th, 2009. Sunny and much drier conditions came in the afternoon of the 28th; however, daytime highs in the modified arctic air stayed mostly in the 50s, with low 60s showing up along the Rio Grande, and mid 40s to near 50 over the east part of South Central Texas. A severe weather event followed during the evening of February 10, 2009. In the final days of the winter of 2008/2009, colder weather with rain came from March 11th to 13th, 2009. Even though Winter 2008/2009 officially ended March 20th, 2009, a strong cold front came in early April 2009.

The winter of 2009/2010 was the first winter since 1885 at San Antonio, where the average monthly temperature for December, January and February stayed below 50 degrees for all 3 months. At Austin Mabry the averages stayed below 50 also; however, this has happened in other winters at Austin. At Del Rio the average monthly temperature was below 50 in December and January and slightly above 50 in February. The table below shows the coldest December to February periods at Austin Mabry, San Antonio and Del Rio, using the average temperature from December to February. This ranking is ranked by event.

AUSTIN					SAN ANTONIO					DEL RIO				
COLDEST DEC-FEB.					COLDEST DEC-FEB.					COLDEST DEC-FEB				
FROM 1854-2010					FROM 1885-2010					FROM 1905-2010				
1.	DEC	1855-FEB	1856	43.7	1.	DEC	1977-FEB	1978	47.7	1.	DEC	1963-FEB	1964	48.6
2.	DEC	1978-FEB	1979	46.2	2.	DEC	1983-FEB	1984	47.9	2.	DEC	1978-FEB	1979	49.2
3.	DEC	1977-FEB	1978	46.4	3.	DEC	1898-FEB	1899	48.0	3.	DEC	1983-FEB	1984	49.7
4.	DEC	1880-FEB	1881	46.6	4.	DEC	1963-FEB	1964	48.8	4.	DEC	1912-FEB	1913	49.9
5.	DEC	1876-FEB	1877	47.4	5.	DEC	1904-FEB	1905	48.9		DEC	1914-FEB	1915	49.9
6.	DEC	1911-FEB	1912	47.8		DEC	1976-FEB	1977	48.9		DEC	1967-FEB	1968	49.9
	DEC	1884-FEB	1885	47.8	7.	DEC	2009-FEB	2010	49.1		DEC	1972-FEB	1973	49.9
8.	DEC	1983-FEB	1984	47.9	8.	DEC	1978-FEB	1979	49.3		DEC	2009-FEB	2010	49.9
	DEC	1963-FEB	1964	47.9	9.	DEC	1967-FEB	1968	49.7	9.	DEC	1911-FEB	1912	50.0
	DEC	2009-FEB	2010	47.9	10.	DEC	1972-FEB	1973	49.8	10.	DEC	1918-FEB	1919	50.2

Heavy rain events with widespread rains came in the Winter of 2009/2010 in a similar pattern like the winters of 1967/1968, 1991/1992, and 2006/2007. The biggest rain events came on January 14th to 16th, February 3rd, and February 11th. From January 14th to January 16th the heaviest rain amount was 5.32 inches at Leming in Atascosa County. The winter of 2009/2010 was the 8th wettest at Del Rio since December 1905; the 8th wettest at San Antonio since 1871; and a tie for the 40th wettest at Austin Mabry since 1856, with December 1945 to February 1946. Several winter precipitation events from early December to February came. The most extensive winter precipitation event came February 23rd, when snow fell from the Hill Country to adjacent parts of Central Texas, with reports of sleet and trace amounts of snow from Del Rio to San Antonio to Yoakum. Austin Mabry had 0.6 inches of snow; Austin Bergstrom 0.3 inches of snow; and Del Rio a Trace of snow. At San Antonio 0.2 inches of sleet was observed, that melted quickly after it fell. The most snowfall on February 23rd was 2 to near 4 inches across Williamson County.

Freezing temperatures on average come in November or December, and the last freeze on average comes from late February to late March. In some years the earliest date of freezing temperatures has come in October, and the latest date of freezes has come in early to mid April. The average dates of the first freeze from 1950 to 2009 and of the last freeze from 1950 to 2010 are listed below.

Average Date of First and Last Freeze

Location	Average Date of First Freeze 1950-2009	Average Date of Last Freeze 1950-2010
Austin Bergstrom	November 28	March 3
Austin Mabry	December 2	February 23
Blanco	November 10	March 22
Boerne	November 11	March 22
Carrizo Springs	December 1	February 20
Del Rio	December 1	February 22
Eagle Pass	December 4	February 18
Fredericksburg	November 12	March 22
Hallettsville	November 25	February 27
Johnson City	November 13	March 22
Llano	November 9	March 23
New Braunfels	November 24	March 8
Nixon	November 29	February 26
San Antonio	November 26	March 2
Smithville	November 19	March 9
Yoakum	December 1	February 28